

REMARKS

The disclosure is objected to because of the following informalities: “form” in paragraph [0012], line 2, should be –from--. Appropriate correction has been made by replacing paragraph [0012] with a replacement paragraph.

Claims 4-9 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should not depend on any other multiple dependent claim. Claims 4-7 have been amended to depend from claim 1. Claims 8 and 9 no longer depend from multiple dependent claims.

Claims 1-5 stand provisionally rejected on the ground of nonstatutory double patenting over claims 1-6 of copending Application 10/573,623. The provisional rejection of claims 1-5 is overcome because Applicant's have filed herewith a terminal disclaimer.

Claims 1-3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsukawa et al. (U.S. Patent No. 6,153,326) in view of Gibbons et al. (U.S. Patent No. 5,589,280) for the reasons of record. The rejection of these claims is respectfully traversed because neither reference, alone or in combination, suggest use of Applicant's radiation-curable silicone composition in the injection molding process of Matsukawa et al.

Matsukawa et al. teach a method of injection molding including injecting a resin into a mold holding a thin metal plate inside, at a mold temperature of from 100 to 180 °C and an injection pressure of from 100 to 500 kgf/cm² (column 2, lines 42-49). Injection molding is a process for producing molded articles from thermoplastic and thermosetting polymers. Injection molding of thermoplastic polymers typically involves heating the polymer to form a melt, injecting the melt into the mold under pressure, and cooling the melt to form a solid. In the case of thermosetting polymers the injection molding process typically includes injecting the flowable polymer into the mold under pressure, and heating the polymer to form a cross-linked solid.

While a wide variety of thermosetting (cross-linkable) polymers can be used in the injection molding process, the use of radiation-curable polymers is not feasible due to technical and cost

considerations. The use of radiation-curable polymers would necessitate the use of radiation-transparent molds, whereas the molds typically used in injection molding are made of nontransparent machineable materials (e.g., metals).

In the method of the present invention, the silicone composition is cured with radiation to form a silicone rubber (see claim 1, step (iv)). The radiation typically has a wavelength of from 250 to 400 nm (i.e., UV radiation, see paragraph [0052]). In order to cure Applicant's radiation-curable silicone composition in an injection molding process, the molds would have to be constructed of a high grade and costly UV-transparent quartz. Moreover, conventional injection molding equipment would have to be re-designed to accommodate quartz molds and a UV radiation source. Even then, additional technical problems may have to be overcome.

For the reasons stated above, Applicants maintain that it would not have been obvious to one having ordinary skill in the art that radiation curing the silicone resin of Matsukawa et al. would be one of many engineering choices used to cure the silicone. Therefore, Applicants believe that the invention of claim 1 is nonobvious over Matsukawa et al. in view of Gibbons et al.

Furthermore, for the reasons stated above regarding claim 1, Applicants believe that claims 2 and 3, which depend from claim 1, are also nonobvious over Matsukawa et al. in view of Gibbons et al.

You are authorized to charge deposit account 04-1520 for any fees necessary to maintain the pendency of this application. You are authorized to make any additional copies of this sheet needed to accomplish the purposes provided for herein and to charge any fee for such copies to deposit account 04-1520.

Respectfully Submitted,

/Larry A. Milco/
Larry A. Milco, Ph.D.
Reg. No. 41,196
Tel: 989-496-3161